



PS: THE GRAPH IS MEASURED IN SECONDS

MRV and FA heuristic have similar running times for a many of the problems, they may be of easier difficulty, shown by the cluster of points around the origin to about 10 seconds. This means that for these problems, both heuristics perform similarly in terms of efficiency and for easy problems it may not make a difference which one is used.

The FA heuristic takes more time on a lot more points than the Minimum Remaining Values heuristic for some problems that may be of a harder difficulty. The MRV heuristic is generally more efficient than the FA heuristic for a lot of these instances as MRV never takes more than 10 seconds whereas the FA takes up to 50 seconds in one of them.

The MRV heuristic selects the variable with the smallest domain, which finds

inconsistencies faster and reduces the search space. The FA heuristic just selects the next variable without considering its domain. This leads to a larger search space and longer running times especially more difficult problems.

Therefore, MRV is more efficient, reduces search space, and has shorter running times.